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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,009	12/08/2003	Naoki Matsuda	0425-1099P	9137

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EXAMINER
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GELLNER, JEFFREY L

ART UNIT	PAPER NUMBER
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3643

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/729,009

Applicant(s)

MATSUDA ET AL.

Examiner

Jeffrey L. Gellner

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Acknowledgement is made of Applicant's IDSs received 8 April 2004 and 24 May 2004.

#### *Claim Objections*

Claim 2 is objected to because of the following informality:

In claim 2, line 4, "time difference" should be --a time difference--.

Appropriate correction is required.

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Specification is enabled for a transfer charge that generates a gas of 1.2 moles/100 g or more. Clearly, it is not the case that any transfer charge would achieve the claimed generation of gas per gram. One of ordinary skill in the art would not be able to determine what compositions would meet the limitations of claim 1 without undue experimentation.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, lines 3, 4, and 6, the limitations of “an igniter,” “a transfer charge,” and “a gas generating agent molded article” are indefinite because it is unclear if these limitations have antecedent basis in claim 1.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1<sup>3</sup> are rejected under 35 U.S.C. 102(b) as being anticipated by Dahl et al. (US 6,139,055).

As to claims 1 and 3, Dahl et al. disclose a gas generator for an air bag (see abstract) comprising a housing (shown in Fig. 1) having a gas discharging hole (shown in Fig. 1), an ignition means (Fig. 1) activated by an impact, and a combustion chamber (shown in Fig. 1) accommodating a gas generating agent which is ignited and burnt to generate a combustion gas, wherein, the ignition means includes an igniter (62 of Fig. 1) and a transfer charge (66 of Fig. 1), the transfer charge is a mixture of transfer charge powder, boron and niter (“boron potassium

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nitrate” of col. 7 lines 31-40) and a gas generating agent molded article (“various other materials” of col. 7 lines 31-40), and the gas generating agent molded article generates gas of 1.2 moles/100 g or more (inherent, in that if the composition is physically the same it must have the same properties, see MPEP 2112.01 II, not the case law of *In re Ludke*, 169 USPQ 563; *In re Swinehart* 169 USPQ 226; *In re Fitzgerald* 205 USPQ 594; *In re Best et al.*, 195 USPQ 430; and, *In re Brown* 173 USPQ 685).

As to claim 2, Dahl et al. further disclose two ignition means (shown in Fig. 1) with igniter and transfer charge (Fig. 1), the two igniters activated with a time difference (form “multi-stage inflator” of abstract), a second transfer charge having only a gas generating molded article (from “may or may not have a different composition that igniter 66 of primary igniter assembly” of col. 7 lines 31-40).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahl et al. (US 6,139,055).

As to claims 4 and 6, the limitations of claims 1 and 2 are disclosed and described above. Not disclosed is the temperature of the gas generating agent in the combustion chamber for inflating the air bag is 1000 to 1700C or 1700 to 3000C. It would have been obvious to one of

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ordinary skill in the art at the time of the invention to modify gas generator of Dahl et al. by having the composition of the generator gas to have a temperature of 1000 to 1700C or 1700 to 3000C as to achieve a specific goal.

As to claim 5, the limitations of claim 1 are disclosed and described above. Not disclosed is the temperature of the gas generating molded article in the transfer charge is 1000 to 3000C. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the gas generator of Dahl et al. by having the composition of the transfer charge to have a temperature of 1000 to 3000C so as to achieve a specific goal.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahl et al. (US 6,139,055) in view of Nielson et al. (US 6,224,099 B1).

As to claim 7, the limitations of claim 4 are disclosed and described above. Not disclosed is the gas generating agent being guanidine nitrate and basic copper nitrate. Nielson et al., however, discloses a gas generating agent of guanidine nitrate and basic copper nitrate (col. 6, lines 39-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the gas generator Dahl et al. by having the gas generating agent of guanidine nitrate and basic copper nitrate so as to have an effect composition.

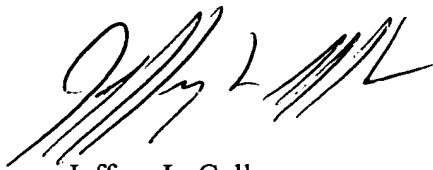
### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Matsuda et al. ('444) and Matsuda et al. ('188) disclose in the prior art various similar applications.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey L. Gellner whose telephone number is 571.272.6887. The examiner can normally be reached on Monday-Friday, 8:30-4:00, alternate Fridays off, if attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 571.272.6891. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Jeffrey L. Gellner', with a stylized flourish at the end.

Jeffrey L. Gellner  
Primary Examiner  
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